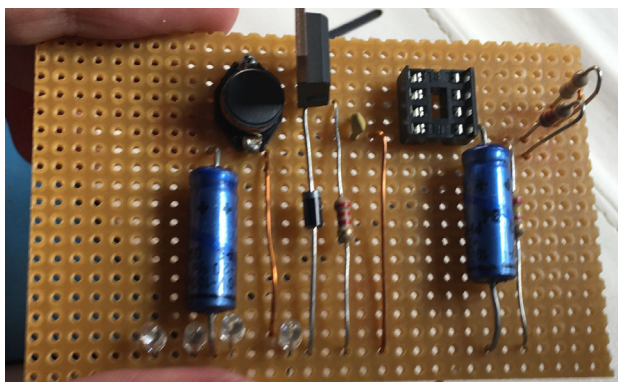


Research Topic	Recovery of regenerative power generated by maglev	Graduate School of Engineering
Host University	Technische Hochschule Aschaffenburg/ Aschaffenburg / Germany	Electrical, Electronic and Mechanical Engineering
Duration	From August 16, 2019 to January 31, 2020	OKAMORI Daichi

Summary of the Research Activities

I research a magnetic levitation (maglev) transport system at a university. One of the problems with maglev transport system is not good at the efficiency. The solution solving this problem is to use regeneration ; it generates the electric power during the braking operation of the maglev transport system. So, I researched on the regenerative system in the laboratory of Prof. Teigelkoetter , who is conducting advanced research on regenerative power recovery.

In his laboratory , the experiments were conducted using batteries for some practical experiments. These system are actually used in trains and other facilities. In Japan, it is difficult to conduct such experiments due to various regulations and restrictions. Additionally Prof. Teigelkoetter’s laboratory focuses on training human resources. His student can be active as engineers in the future. Prof. Teigelkoetter considers that one of the most important things for the professor is the cultivation of the human resources as the researchers. So, he sets up my research plan so that I could study programming and soldering skill while studying the regenerative power. In this program, I have got the regenerative power system knowledge and the practical skills such as programming and soldering. In the future, we will use the acquired skills and knowledge for my research as an engineer.



Control device of regenerative power

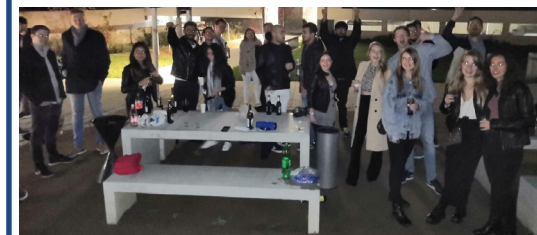


My work space

College Life, Friends and Others

Technische Hochschule Aschaffenburg has support for international students.

For example, as a part of exchange student activities , we held home parties and went sightseeing. Thanks to these activities, I was able to live a very fulfilling study abroad life.



Home party for exchange student

指導教員講評

メカトロ研初派遣の研究室での研究調査は大変だったと思いますが、海外の学生と協同で良い結果を得られたことは、非常に有益であったと思います。

指導教員氏名: 森實 俊充